

AN APPARATUS AND METHOD OF DOPING SILICA
WITH FLUORINE DURING LAYDOWN

ABSTRACT OF THE DISCLOSURE

A method for doping silica soot with fluorine during laydown, including
5 providing a bait rod, and providing a burner, wherein the burner emits a reactant flame.
The method also including providing at least one first gas-feed separate from the
burner, wherein the gas-feed supplies a first jet of fluorine-based gases, and depositing
a layer of silica soot on the bait rod by vaporizing a silica producing gas within the
reactant flame of the burner. The method further including supplying the first jet of
10 fluorine-based gases to the silica soot deposited on to the bait rod via the first gas-feed
subsequent to vaporizing at least a portion of the silica producing gas within the
reactant flame of the burner.

TO BE FORWARDED TO THE PATENT OFFICE